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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	09/945,535
Filing Date	August 30, 2001
First Named Inventor	Ahn, Kie
Group Art Unit	2813
Examiner Name	Blum, David

Sheet 1 of 3

Attorney Docket No: 1303.026US1

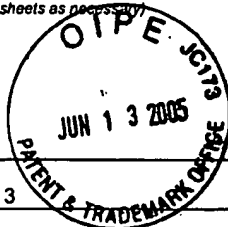
US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
<i>D</i>	US-2001/0030352-A1	10/18/2001	Ruff, Alexander , et al.	02/28/2001
	US-2002/0111001-A1	08/15/2002	Ahn, Kie Y.	02/09/2001
	US-2002/0155688-A1	10/24/2002	Ahn, Kie Y.	04/20/2001
	US-2002/0155689-A1	10/24/2002	Ahn, Kie Y.	02/11/2002
	US-2002/0192975-A1	12/19/2002	Ahn, Kie Y.	06/17/2002
	US-2002/0192979-A1	12/19/2002	Ahn, Kie Y.	06/17/2002
	US-2003/0003702-A1	01/02/2003	Ahn, Kie Y.	08/26/2002
	US-2003/0017717-A1	01/23/2003	Ahn, Kie Y.	07/18/2001
	US-2003/0043637-A1	03/06/2003	Forbes, Leonard , et al.	08/30/2001
	US-2003/0045060-A1	03/06/2003	Ahn, Kie Y.	08/30/2001
	US-2003/0049942-A1	03/13/2003	Haukka, S. , et al.	08/22/2002
	US-2003/0119246-A1	06/26/2003	Ahn, Kie Y.	12/20/2001
	US-2003/0119291-A1	06/26/2003	Ahn, Kie Y., et al.	12/20/2001
	US-2003/0132491-A1	07/17/2003	Ahn, Kie Y.	01/17/2002
	US-2003/0185980-A1	10/02/2003	Endo, K.	03/31/2003
	US-2003/0207032-A1	11/06/2003	Ahn, Kie Y., et al.	05/02/2002
	US-2003/0207540-A1	11/06/2003	Ahn, Kie Y., et al.	05/02/2002
	US-2003/0227033-A1	12/11/2003	Ahn, Kie Y., et al.	06/05/2002
	US-2004/0007171-A1	01/15/2004	Ritala, Mikko , et al.	07/10/2003
	US-2004/0009679-A1	01/15/2004	Yeo, J. , et al.	07/10/2003
	US-2004/0023461-A1	02/05/2004	Ahn, Kie Y., et al.	07/30/2002
	US-2004/0033661-A1	02/19/2004	Yeo, J. , et al.	06/02/2003
	US-2004/0038554-A1	02/26/2004	Ahn, Kie Y.	08/21/2002
	US-2004/0043541-A1	03/04/2004	Ahn, Kie Y.	08/29/2002
	US-2004/0043569-A1	03/04/2004	Ahn, Kie Y.	08/28/2002
	US-2004/0110348-A1	06/10/2004	Ahn, Kie Y., et al.	12/04/2002
	US-2004/0110391-A1	06/10/2004	Ahn, K. Y., et al.	12/04/2002
	US-2004/0134365-A1	08/26/2004	Ahn, Kie Y., et al.	02/27/2004
	US-2004/0144980-A1	07/29/2004	Ahn, Kie Y., et al.	01/29/2003
	US-2004/0164357-A1	08/26/2004	Ahn, Kie Y., et al.	02/27/2004
	US-2004/0168627-A1	09/02/2004	Conley, Jr., J. F., et al.	02/27/2003
	US-2004/0171280-A1	09/02/2004	Conley, Jr., J. F., et al.	02/27/2003
	US-2004/0175882-A1	09/09/2004	Ahn, Kie Y., et al.	03/04/2003
	US-2004/0183108-A1	09/23/2004	Ahn, Kie Y.	01/27/2004
	US-2004/0185654-A1	09/23/2004	Ahn, Kie Y.	01/30/2004
	US-2004/0203254-A1	10/14/2004	Conley, Jr., J. F., et al.	04/11/2003
	US-2004/0235313-A1	11/25/2004	Frank, M. M., et al.	06/24/2004
	US-2004/0266217-A1	12/30/2004	Kim, K. , et al.	06/23/2004
	US-2005/0009370-A1	01/13/2005	Ahn, Kie Y.	08/04/2004
	US-2005/0023578-A1	02/03/2005	Bhattacharyya, A.	08/25/2004

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DATE CONSIDERED

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Sheet 2 of 3

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Filing Date August 30, 2001
First Named Inventor Ahn, Kie
Group Art Unit 2813
Examiner Name Blum, David

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DS	US-2005/0023594-A1	02/03/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0023613-A1	02/03/2005	Bhattacharyya, A.	08/25/2004
	US-2005/0023624-A1	02/03/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0023625-A1	02/03/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0023626-A1	02/03/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0023627-A1	02/03/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0026374-A1	02/03/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0029547-A1	02/10/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0029604-A1	02/21/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0029605-A1	02/10/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0032292-A1	02/10/2005	Ahn, K. Y., et al.	08/31/2004
	US-2005/0037563-A1	02/17/2005	Ahn, Kie Y.	08/31/2004
	US-2005/0051828-A1	03/10/2005	Park, K., et al.	04/21/2004
	US-2005/0054165-A1	03/10/2005	Ahn, K. Y., et al.	03/31/2003
	US-2005/0077519-A1	04/14/2005	Ahn, Kie, et al.	10/10/2003
	US-5,562,952	10/08/1996	Nakahigashi, Takahiro, et al.	04/04/1995
	US-5,646,583	07/08/1997	Seabury, C. W., et al.	01/04/1996
	US-5,674,563	10/07/1997	Tarui, Yasuo, et al.	09/14/1994
	US-5,751,021	05/12/1998	Teraguchi, Nobuaki	04/22/1996
	US-5,827,571	10/27/1998	Lee, Seung S., et al.	09/17/1997
	US-6,632,279	10/14/2003	Ritala, M., et al.	10/13/2000
	US-6,686,212	02/03/2004	Conley, Jr., J. F., et al.	10/31/2002
	US-6,699,747	03/02/2004	Ruff, Alexander, et al.	11/18/2002
	US-6,709,989	03/23/2004	Ramdani, J., et al.	06/21/2001
	US-6,777,353	08/17/2004	Putkonen, M.	04/08/2003
	US-6,787,413	09/07/2004	Ahn, Kie Y.	06/17/2002
	US-6,790,791	09/14/2004	Ahn, Kie Y., et al.	08/15/2002
	US-6,812,100	11/02/2004	Ahn, K. Y., et al.	03/13/2002
	US-6,828,632	12/07/2004	Bhattacharyya, A.	07/18/2002
	US-6,884,739	04/26/2005	Ahn, K. Y., et al.	08/15/2002
✓	US-6,893,984	05/17/2005	Ahn, K. Y., et al.	02/20/2002
	US-6,900,122	05/31/2005	Ahn, K. Y., et al.	12/20/2001

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T ²
DS	WO-04079796A3	09/16/2004	Ahn, K. Y., et al.	

EXAMINER

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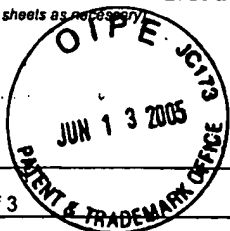
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Sheet 3 of 3

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Filing Date	August 30, 2001
First Named Inventor	Ahn, Kie
Group Art Unit	2813
Examiner Name	Blum, David

Attorney Docket No: 1303.026US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Dz		CHIN, A. , et al., "High Quality La ₂ O ₃ and Al ₂ O ₃ Gate Dielectrics with Equivalent Oxide Thickness 5-10Å", <u>Digest of Technical Papers. 2000 Symposium on VLSI Technology, 2000, Honolulu, (June 13-15, 2000), 16-17</u>	
		COPEL, M. , et al., "Formation of a stratified lanthanum silicate dielectric by reaction with Si(001)", <u>Applied Physics Letters, 78(11), (March 12, 2001), 1607-1609</u>	
		DIMOULAS, A. , et al., "Structural and electrical quality of the high-k dielectric Y ₂ O ₃ on Si (001): Dependence on growth parameters", <u>Journal of Applied Physics, 92(1), (July 1, 2002), 426-431</u>	
		GUHA, S. , et al., "Atomic beam deposition of lanthanum-and yttrium-based oxide thin films for gate dielectrics", <u>Applied Physics Letters, 77, (2000), 2710-2712</u>	
		GUHA, S. , et al., "High temperature stability of Al ₂ O ₃ dielectrics on Si: Interfacial metal diffusion and mobility degradation", <u>Applied Physics Letters, Vol. 81, No. 16, (14 October 2002), 2956-2958</u>	
		HUANG, C. H., et al., "La/sub 2/O/sub 3/Si/sub 0.3/Ge/sub 0.7/ p-MOSFETs with high hole mobility and good device characteristics", <u>IEEE Electron Device Letters, 23(12), (December 2002), 710-712</u>	
		IWAI, H. , et al., "Advanced gate dielectric materials for sub-100 nm CMOS", <u>International Electron Devices Meeting, 2002. IEDM '02. Digest., (December 8-11, 2002), 625-628</u>	
		KO, MYOUNG-GYUN , et al., "High density plasma enhanced atomic layer deposition of lanthanum oxide for high-k gate oxide material", <u>207th Meeting of the Electrochemical Society, (May 2005), 1 page</u>	
		MARIA, J. P., et al., "High temperature stability in lanthanum and zirconia-based gate dielectrics", <u>Journal of Applied Physics, 90(7), (October 1, 2001), 3476-3482</u>	
		MICHAELSON, HERBERT B., "The work function of the elements and its periodicity", <u>Journal of Applied Physics, 48(11), (November 1977), 4729-4733</u>	
		SHIMIZU, TAKASHI , et al., "Electrical Properties of Ruthenium/Metalorganic Chemical Vapor Deposited La-Oxide/Si Field Effect Transistors", <u>Jpn. J. Appl. Phys., Vol. 42, Part 2, No. 11A, (2003), L1315-L1317</u>	
		YAMADA, HIROTOSHI , et al., "MOCVD of High-Dielectric-Constant Lanthanum Oxide Thin Films", <u>Journal of The Electrochemical Society, 150(8), (August 2003), G429-G435</u>	
		ZHONG, HUICAI , et al., "Electrical Properties of Ru and RuO ₂ Gate Electrodes for Si-PMOSFET with ZrO ₂ and Zr-Silicate Dielectrics", <u>Journal of Electronic Materials, 30(12), (December 2001), 1493</u>	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

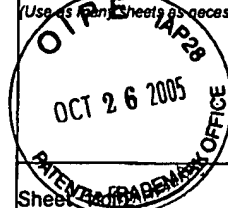
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Examiner Name	Blum, David

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US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
DS	US-2002/0142536-A1	10/03/2002	Zhang, F. , et al.	04/22/2002
	US-2004/0075111-A1	04/22/2004	Chidambarrao, D. , et al.	10/10/2003
	US-2004/0156578-A1	08/12/2004	Geusic, Joseph , et al.	02/05/2004
	US-2004/0159863-A1	08/19/2004	Eldridge, Jerome M., et al.	02/18/2004
	US-2004/0164365-A1	08/26/2004	Ahn, Kie Y., et al.	02/27/2004
	US-2004/0219783-A1	11/04/2004	Ahn, Kie Y., et al.	05/25/2004
	US-2004/0233010-A1	11/25/2004	Akram, Salman , et al.	05/22/2003
	US-2004/0264236-A1	12/30/2004	Chae, S. , et al.	04/30/2004
	US-2005/0023574-A1	02/03/2005	Forbes, L. , et al.	09/02/2004
	US-2005/0023595-A1	02/03/2005	Forbes, L. , et al.	08/31/2004
	US-2005/0023602-A1	02/03/2005	Forbes, L. , et al.	08/30/2004
	US-2005/0023603-A1	02/03/2005	Eldridge, J. M., et al.	08/30/2004
	US-2005/0024092-A1	02/03/2005	Forbes, L.	08/31/2004
	US-2005/0026349-A1	02/03/2005	Forbes, L. , et al.	09/01/2004
	US-2005/0026360-A1	02/03/2005	Geusic, J E., et al.	07/30/2004
	US-2005/0030825-A1	02/10/2005	Ahn, K. Y.	08/31/2004
	US-2005/0032342-A1	02/10/2005	Forbes, L. , et al.	08/30/2004
	US-2005/0138262-A1	06/23/2005	Forbes, Leonard	12/18/2003
	US-2005/0140462-A1	06/30/2005	Akram, S. , et al.	02/22/2005
	US-2005/0145957-A1	07/07/2005	Ahn, K. Y., et al.	02/16/2005
	US-2005/0158973-A1	07/21/2005	Ahn, K. Y., et al.	01/14/2005
	US-2005/0164521-A1	07/28/2005	Ahn, Kie Y., et al.	03/21/2005
	US-5,049,516	09/17/1991	Arima, H.	12/15/1989
	US-5,426,603	06/20/1995	Nakamura, Masayuki , et al.	01/25/1994
	US-5,981,350	11/09/1999	Geusic, Joseph E., et al.	05/29/1998
	US-6,025,225	02/15/2000	Forbes, Leonard , et al.	01/22/1998
	US-6,090,636	07/18/2000	Geusic, Joseph E., et al.	02/26/1998
	US-6,134,175	10/17/2000	Forbes, Leonard , et al.	08/04/1998
	US-6,150,188	11/21/2000	Geusic, Joseph E., et al.	02/26/1998
	US-6,191,448	02/20/2001	Forbes, Leonard , et al.	03/07/2000
	US-6,198,168	03/06/2001	Geusic, J. E., et al.	01/20/1998
	US-6,317,357	11/13/2001	Forbes, Leonard	05/08/1999
	US-6,381,168	04/30/2002	Forbes, Leonard	02/04/2000
	US-6,399,979	06/04/2002	Noble, Wendell P., et al.	06/16/2000
	US-6,418,050	07/09/2002	Forbes, Leonard	07/27/2001
	US-6,429,065	08/06/2002	Forbes, Leonard	07/27/2001
	US-6,434,041	08/13/2002	Forbes, Leonard , et al.	07/27/2001
	US-6,454,912	09/24/2002	Ahn, Kie Y., et al.	03/15/2001
	US-6,465,298	10/15/2002	Forbes, Leonard , et al.	02/22/2000
	US-6,476,434	11/05/2002	Noble, Wendell P., et al.	05/16/2000

EXAMINER

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Substitute Disclosure Statement Form (PTO-1449)

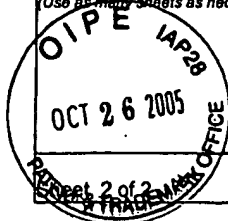
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US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
DS	US-6,486,027	11/26/2002	Noble, Wendell P., et al.	03/08/2000
	US-6,486,703	11/26/2002	Noble, Wendell P., et al.	01/08/2001
	US-6,492,233	12/10/2002	Forbes, Leonard, et al.	02/20/2001
	US-6,498,065	12/24/2002	Forbes, Leonard, et al.	08/30/2000
	US-6,515,510	02/04/2003	Noble, Wendell P., et al.	01/08/2001
	US-6,518,615	02/11/2003	Geusic, Joseph E., et al.	08/20/1998
	US-6,526,191	02/25/2003	Geusic, Joseph E., et al.	08/21/2000
	US-6,538,330	03/25/2003	Forbes, Leonard	03/23/2000
	US-6,590,252	07/08/2003	Kutsunai, T., et al.	08/06/2001
	US-6,597,037	07/22/2003	Forbes, Leonard, et al.	09/26/2000
	US-6,689,660	02/10/2004	Noble, Wendell P., et al.	03/17/2000
	US-6,709,978	03/23/2004	Geusic, Joseph E., et al.	03/06/2001
	US-6,723,577	04/20/2004	Geusic, Joseph E., et al.	08/30/2000
	US-6,754,108	06/22/2004	Forbes, L.	08/30/2001
	US-6,756,298	06/29/2004	Ahn, Kie Y., et al.	08/01/2002
	US-6,764,901	07/20/2004	Noble, Wendell P.	04/17/2000
	US-6,777,715	08/17/2004	Geusic, Joseph E., et al.	07/18/2000
	US-6,778,441	08/17/2004	Forbes, L., et al.	08/30/2001
	US-6,787,370	09/07/2004	Forbes, Leonard	12/16/2002
	US-6,804,136	10/12/2004	Forbes, Leonard	06/21/2002
	US-6,812,513	11/02/2004	Geusic, J. E., et al.	02/03/2003
	US-6,812,516	11/02/2004	Noble, Jr., W., et al.	08/28/2002
	US-6,818,937	11/16/2004	Noble, W., et al.	06/04/2002
	US-6,858,120	02/22/2005	Ahn, Kie, et al.	08/09/2002
	US-6,858,444	02/22/2005	Ahn, K. Y., et al.	06/20/2003
	US-6,888,739	05/03/2005	Forbes, L.	06/21/2002
	US-6,914,800	07/05/2005	Ahn, K. Y., et al.	08/31/2004
	US-6,919,266	07/19/2005	Ahn, Kie Y., et al.	07/24/2001
	US-6,921,702	07/26/2005	Ahn, K. Y., et al.	07/30/2002
	US-6,930,059	08/16/2005	Conley, Jr., J. F., et al.	02/27/2003
	US-6,930,346	08/16/2005	Ahn, K. Y., et al.	08/31/2004
	US-6,958,302	10/25/2005	Ahn, K. Y., et al.	12/04/2002

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

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DS		"Praseodymium Oxide, Pr ₂ O ₃ For Optical Coating", Technical Publication by CERAC about Praseodymium Oxide, http://www.cerac.com/pubs/proddata/pr2o3.htm , (Sep. 21, 2005), 1-2	

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